

**FLEXURAL STRENGTH
OF
CONCRETE
(Using Simple Beam with Third-Point Loading)
AASHTO T 97**

APPARATUS

- [] Testing machine has a verification of calibration within the last 12 months

PROCEDURE

- [] Test specimen turned on its side with respect to its position as molded and centered on bearing blocks
- [] Load-applying blocks brought in contact with surface of specimen at the third points between supports
- [] No gap greater than 0.004 in. for a 1 in. length exists between load applying blocks and support blocks and the specimen
- [] If excessive gap exists, the specimen contact surface are ground or capped, or leather strips are used for shims
- [] Leather shims only used when specimen surfaces in contact with blocks or supports does not exceed 0.015 in.
- [] Leather shims, when used, are a uniform 1/4 in. thickness, 1 to 2 in. in width, and extend across the full width of specimen
- [] Hand wheel rotated clockwise and pen kept within spiral loading track
- [] If fracture occurs outside the middle third of beam, the test result is discarded
- [] After test, three measurements (one at each edge and one at the center) taken to the nearest 1/16 in. to determine average width, average depth, and line of fracture. Width and depth measurements are made on beam in testing machine
- [] Modulus of rupture of specimen determined by multiplying the maximum applied load indicated by test machine in lbf by the factor determined from the testing machine table to nearest 5 psi

Acceptance Technician

INDOT

Date

Comments _____

